

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS

1 (currently amended) A contaminant detecting system for determining the presence of a contaminant in a fluid used in a microbial decontamination process, comprising:

a capacitor having first and second conducting elements, said fluid being a dielectric therebetween, and being used to process an article in the microbial decontamination process; [[and]]

sensing means ~~for sensing~~ responsive to a change in an electrical property of the capacitor, said change in the electrical property varying according to the presence of the contaminant in the fluid, said contaminant being removed from said article during the microbial decontamination process; and

control means for receiving a measured value from said sensing means indicative of the electrical property of the capacitor, said control means capable of detecting the presence of miscible and immiscible contaminants in the fluid, wherein said control means:

(a) determines the presence of a miscible contaminant in the fluid if the measured value deviates a predetermined amount from a threshold value, and

(b) determines the presence of an immiscible contaminant in the fluid if said measured value spikes from a base value during a predetermined time period.

2. (previously presented) A contaminant detecting system according to claim 1, wherein said sensing means includes a sensing circuit for sensing capacitance.

3. (previously presented) A contaminant detecting system according to claim 2, wherein said sensing circuit includes means for generating a digital value indicative of an input capacitance.

4. (original) A contaminant detecting system according to claim 3, wherein said means for generating the digital value indicative of the input capacitance is selected from the group consisting of: a charge-transfer capacitance sensor IC and a capacitance-to-digital-converter (CDC).

5 (canceled).

6. (currently amended) A contaminant detecting system according to ~~claim 5~~claim 1, wherein said control means includes:

means for comparing said measured value with ~~[[a]]~~the threshold value to determine ~~whether a contaminant is present in the fluid~~if the measured value deviates a predetermined amount from said threshold value.

7-8 (canceled).

9. (currently amended) A contaminant detecting system according to claim 1, wherein said ~~contaminant is a~~ miscible contaminant selected from the group consisting of: blood, urine, and miscible soil.

10-11 (canceled).

12. (currently amended) A contaminant detecting system according to claim 1 wherein said ~~contaminant is an~~ immiscible contaminant selected from the group consisting of: dirt, bone matter, skin, organ tissue, and immiscible soil.

13. (currently amended) A method for determining the presence of a contaminant in a fluid used in a microbial decontamination process, comprising:

passing the fluid between a capacitor having first and second conducting elements, said fluid being a dielectric therebetween, and being used to process an article in the microbial decontamination process; and

determining ~~a change in a~~ measured value indicative of an electrical property of the capacitor, said ~~change in the~~ electrical property varying according to the presence of the contaminant in the fluid, said contaminant being removed from said article during the microbial decontamination process;

detecting the presence of a miscible contaminant in the fluid if the measured value deviates a predetermined amount from a threshold value, and

detecting the presence of an immiscible contaminant in the fluid if the measured value spikes from a base value during a predetermined time period.

14. (original) A method according to claim 13, wherein said electrical property is capacitance.

15 (canceled).

16. (currently amended) A method according to ~~claim 15~~claim 13, wherein said method further comprises:

comparing said measured value with ~~[[a]]~~the threshold value to determine whether the measured value deviates said predetermined amount from said threshold value; and

~~determining whether a contaminant is present in the fluid in accordance with said comparison.~~

17-20 (canceled).

21. (currently amended) A method according to claim 13, wherein said ~~contaminant~~ is an immiscible contaminant selected from the group consisting of: dirt, bone matter, skin, organ tissue, and immiscible soil.

22. (previously presented) A contaminant detecting system according to claim 1, wherein said microbial decontamination process is selected from the group consisting of: a washing process, an antimicrobial treatment process and a rinsing process.

23-31 (canceled).

32. (currently amended) A method according to claim 13, wherein said ~~contaminant~~ is a miscible contaminant selected from the group consisting of: blood, urine, and miscible soil.

33. (previously presented) A method according to claim 13, wherein said microbial decontamination process is selected from the group consisting of: a washing process, an antimicrobial treatment process and a rinsing process.

34-41 (canceled).